

# OVERLAY TARGET AND MEASUREMENT METHOD USING REFERENCE AND SUB-GRIDS

## 5 ABSTRACT OF THE DISCLOSURE

A method of determining alignment error in electronic substrates comprises providing on a layer of a substrate a first contrasting set of elements forming a first grid pattern having a plurality of grid segments in the x and y directions. The method also includes providing nested within at  
10 least one of the first grid pattern segments, on the same or different layer of a substrate, a second contrasting set of elements forming a second grid pattern having a plurality of grid segments in the x and y directions. The method then includes determining the center of the first set of elements in the first grid pattern and determining the center of the second set of elements in the second grid pattern. The method then comprises comparing the centers of the first and second  
15 sets of elements and determining alignment error of the first and second grid patterns.

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